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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,045	07/31/2001	Ramesh Nagarajan	15-12	4258

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EXAMINER

BLOUNT, STEVEN

ART UNIT PAPER NUMBER

2668

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/919,045	Applicant(s) NAGARAJAN ET AL.	
	Examiner Steven Blount	Art Unit 2668	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 4 and 6 - 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 4 and 6 - 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 4 and 6 - 14 rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (hereinafter AAPA) in view of U.S. patent 6,493,350 to Hojo et al.

With regard to claim 1, AAPA states that when, in optical transport networks, a connection setup request is made (page 1, lines 20+), one of the problems that results is resource contention which occurs because cross connect requests are made for the same common link path at the same time, from alternate ends of the connection (lines 32+) which ties up wavelength ports. AAPA does not address the solution to this problem, however, by having neighboring nodes negotiate a predefined sequence to assign a link resource.

Hojo et al also addresses the same problem – see col 9 lines 43+. Hojo also teaches negotiating a predefined sequence through band control units 1901 associated with the individual nodes (labeled A, B) wherein it is stated “band managing unit 1901 controls the synchronization of the wavelength control tables for controlling the transmission wavelengths of the variable wavelength transmission units in the two adjacent node devices for outputting to the same optical fiber transmission line” (col 53

lines 7+). Hojo also states that a packet is used for sending the information to another node, wherein "a node device A analyzes the packet from the node device A descriptive of the information about the arrangement in the basic pattern of the wavelength control tables of the groups A and B, and outputs the clock count command signal to the ROM counters III or IV pursuant to the altered basic pattern (col 53 lines 53+)." This using a pattern to avoid contention is discussed extensively in Hojo. See col 9, lines 43+ and col 10, lines 10+, for example. See also col 35 lines 10+ where the different wavelength patterns are discussed.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have solved the contention problem mentioned in AAPA by negotiating a predefined sequence to assign link resources, in light of the teachings of Hojo et al, in order to provide a means for avoiding contention and optimizing the network resources.

With regard to claim 2, see the mention of a table above.

With regard to claim 3, the system of Hojo is optical.

With regard to claim 4, wavelengths are the resources.

With regard to claim 6, see the discussion of claim 1.

With regard to claim 7, wavelengths are the resource.

With regard to claim 8, see the rejection of claim 1 and note member 407 (fig 4) and 165 (fig 9B).

With regard to claim 9, note the discussion of a table above, and the mention of ports in AAPA as well as the fact that ports are shown in figure 1A.

With regard to claim 10, note the system is optical.

With regard to claim 11, note wavelengths are used.

With regard to claim 12, see the rejection of claim 1 as well as memory 405 in figure 4.

With regard to claims 13 – 14, see the rejections above.

3. Claims 1, 6, 8, and 12 are rejected under 35 U.S.C. 103(a) as being obvious over AAPA as applied above, in view of U.S. patent 6,882,799 to Beshai et al.

AAPA teaches the problem in the art as described above, but again does not teach its solution to comprise having neighboring nodes negotiate a predefined sequence to assign a link resource.

Beshai et al teach forwarding table 440 (fig 11) used by ingress and egress routers 200 and 210 (fig 2) to access output ports “in a predetermined order” (col 12 lines 37+) wherein the controller 202 updates new paths as the traffic loads change. See col 7 lines 20+ and also col 8 lines 34+ (202 forwarding data traffic received at the ports).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have solved the problem stated in AAPA regarding port contention by negotiating link resources in a predefined sequence in light of the teachings of Beshai et al in order to provide a means for efficiently distributing the wavelength resources.

4. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 9/14/2005 have been fully considered but they are not persuasive.

The examiner notes that cross connection requests and their associated collision problems are taught in AAPA. Further, the contention avoidance scheme taught in Hojo et al would be applicable to the problem addressed in the prior art.

The examiner believes that one of ordinary skill in the art would recognize that there is no appreciable difference between having the negotiation occur prior to, or after receipt of the connection request.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2661

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 - 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ajit Patel
Primary Examiner

SB

11/22/05